

We claim:

1. A liquid crystal display device comprising: two substrates arranged so as to be opposed to each other; parallel flat electrodes formed on the surfaces of the two substrates and at least one of which is a transparent electrode; and a liquid crystal layer having liquid crystal sandwiched between the parallel flat electrodes, wherein one pixel is made up of two or more sub-pixels controllable independently of each another, and wherein the area of the display effective domain of at least one of the two or more sub-pixels is different from the area of the display effective domain of other sub-pixels.

2. A liquid crystal display device, as set forth in claim 1, wherein the display effective domain is defined by the domain of a wavelength selection layer.

3. A liquid crystal display device, as set forth in claim 1, wherein the display effective domain is defined by at least one of the transmission domain and the reflection domain of a pixel electrode.

4. A liquid crystal display device, as set forth in claim 2, wherein the wavelength selection layer is a color filter formed by mixing transparent resin with pigment or dye.

5. A liquid crystal display device, as set forth in claim 2, wherein the film thickness of the wavelength selection layer of at least one of the sub-pixels is different from the film thickness of the wavelength selection layer of other pixels.

6. A liquid crystal display device, as set forth in claim 1, wherein one pixel is made up of at least three or more sub-pixels of RGB or YMC.

7. A liquid crystal display device, as set forth in claim 1, wherein the pixel electrode comprises a reflection domain on part of the surface of which unevenness is formed.

8. A liquid crystal display device, as set forth in claim 1, wherein the setting of color adjustment is

carried out on the assumption that the color temperature of a light source is equal or lower than the color temperature of D65.

5           9. A liquid crystal display device comprising: a transparent electrode; a reflecting plate having wrinkle-like unevenness on the surface thereof; and a liquid crystal layer provided between the transparent electrode and the reflecting plate, wherein at least part of the wrinkle-like unevenness has a first linear part extending  
10 in a first part, a second linear part extending from the top end of the first linear part in a second direction different from the first direction by certain angles to a predetermined side, and a third linear part extending from the top end of the second linear part in a direction  
15 which different from the second direction by certain angles to the predetermined side.

          10. A liquid crystal display device, as set forth in claim 9, wherein the direction in which the wrinkle-like unevenness mainly extends is a vertical or  
20 transverse direction on the display surface of the liquid crystal display device.

          11. A liquid crystal display device, as set forth in claim 9, wherein the distance between neighboring crests or troughs of the wrinkle-like unevenness is equal  
25 to or less than 15 $\mu$ m.

          12. A liquid crystal display device, as set forth in claim 9, wherein the distance between neighboring crests or troughs of the wrinkle-like unevenness differs randomly.

30           13. A liquid crystal display device, as set forth in claim 9, wherein the distance between neighboring crests or troughs of the wrinkle-like unevenness differs from each another for each pixel.

35           14. A liquid crystal display device, as set forth in claim 9, wherein the difference between the first direction and the second direction and the difference between the second direction and the third direction are

equal to or less than  $45^{\circ}$ .

15. A liquid crystal display device, as set forth in claim 9, wherein the average tilting angle of the wrinkle-like unevenness is  $5^{\circ}$  to  $15^{\circ}$ .

5        16. A liquid crystal display device, as set forth in claim 9, further comprising a structure provided beneath the reflecting plate and having unevenness, wherein the wrinkle-like unevenness of the reflecting plate is almost in accordance with the unevenness of the structure.

10        17. A liquid crystal display device, as set forth in claim 16, wherein the structure is formed in the same layer as at least any one of the signal wire, gate wire and storage capacitor of the TFT substrate, or part of the structure is formed in the same layer as at least one of the signal wire and the gate wire of the TFT substrate.

15        18. A liquid crystal display device, as set forth in claim 17, wherein at least any one of the signal wire, gate wire and storage capacitor is bent in a similar fashion as the structure.

20        19. A liquid crystal display device, as set forth in claim 18, wherein the side of a pixel electrode is bent in a similar fashion as the structure.

25        20. A liquid crystal display device, as set forth in claim 9, wherein the reflecting plate has a light transmission domain and a display of a transmission type and a display of a reflection type are possible.

30        21. A liquid crystal display device, as set forth in claim 9, wherein the liquid crystal layer is of a vertically aligned type using n-type liquid crystal.

35        22. A liquid crystal display device comprising: two substrates arranged so as to be opposed to each other; parallel flat electrodes formed on the surfaces of the two substrates and at least one of which is a transparent electrode; and a liquid crystal layer having liquid crystal sandwiched between the parallel flat electrodes

and in which the liquid crystal molecules are aligned so that the direction of the major axis of the liquid crystal molecule becomes substantially perpendicular to at least one of the electrode surfaces while no voltage is being applied between the parallel flat electrodes, that is, during the period with no voltage being applied, wherein an alignment process is carried out on at least one of the parallel flat electrodes so that while a voltage is being applied between the parallel flat electrodes, that is, during the period with a voltage being applied, the liquid crystal molecules are tilted almost in the same direction and a domain, in which the tilting orientation of the liquid crystal molecules in the oblique electric field on the outer surface of a pixel and the alignment orientation meet at an angle exceeding  $90^\circ$ , is minimized.

23. A liquid crystal display device, as set forth in claim 22, wherein the pixel electrode has a strip-like shape and an alignment process is carried out thereon so that the liquid crystal molecules are tilted in the longitudinal direction of the pixel electrode during the period with a voltage being applied.

24. A liquid crystal display device, as set forth in claim 23, wherein the pixel electrode is rectangular and an alignment process is carried thereon so that the liquid crystal molecules are tilted in the direction of the long side of the pixel electrode during the period with a voltage being applied.

25. A liquid crystal display device, as set forth in claim 22, wherein at least part of the pixel comprises a reflection domain having a surface the difference in level of the unevenness of which is equal to or less than  $15\mu\text{m}$  and operation as a reflection type or a semi-transmission type is possible.

26. A liquid crystal display device, as set forth in claim 23, wherein the end part in the longitudinal direction of the pixel electrode is provide with a dip

for increasing the thickness of the liquid crystal layer.

27. A liquid crystal display device, as set forth in claim 26, wherein the dip includes the contact hole for the pixel electrode.

5        28. A liquid crystal display device, as set forth in claim 22, wherein the alignment process uses at least any one of a rubbing alignment process, an ion beam alignment process, an aligned film UV alignment process and a UV curable resin alignment process.

10       29. A liquid crystal display device, as set forth in claim 28, wherein the liquid crystal display device is a liquid crystal display device of an active matrix type using TFT and an alignment control is taken only on the opposed electrode (common electrode) side.

15       30. A liquid crystal display device, as set forth in claim 22, wherein the liquid crystal is n-type nematic liquid crystal whose dielectric constant anisotropy is negative.

20       31. A liquid crystal display device, as set forth in claim 22, wherein the liquid crystal is p-type nematic liquid crystal whose dielectric constant anisotropy is positive.